CONTENTS OF VOLUME 468

August 1993

FIRESTEIN Stuart, PICCO Cristiana & MENINI Anna The relation between stimulus and response in olfactory receptor cells of the tiger salamander. 1

BOLSHAKOV Vadim Yu., GAPON Svetlana A., KATCHMAN Alexander N. & MAGAZANIK Lev G. Activation of a common potassium channel in molluscan neurones by glutamate, dopamine and muscarinic agonist. 11

NEGRETTI N., O'NEILL S.C. & EISNER D.A. The effects of inhibitors of sarcoplasmic reticulum function on the systolic Ca^{2+} transient in rat ventricular myocytes. 35

TROUSLARD J., MARSH S.J. & BROWN D.A. Calcium entry through nicotinic receptor channels and calcium channels in cultured rat superior cervical ganglion cells. 53

HABGOOD M.D., KNOTT G.W., DZIEGIELEWSKA K.M. & SAUNDERS N.R. The nature of the decrease in blood–cerebrospinal fluid barrier exchange during postnatal brain development in the rat. 73

KIYOSUE T., ARITA M., MURAMATSU H., SPINDLER A.J. & NOBLE D. Ionic mechanisms of action potential prolongation at low temperature in guinea-pig ventricular myocytes. 85

HUANG C.L.-H. Charge inactivation in the membrane of intact frog striated muscle fibres. 107

WANG Q. & LARGE W.A. Action of histamine on single smooth muscle cells dispersed from the rabbit pulmonary artery. 125

RACKE Frederick K. & NEMETH Edward F. Cytosolic calcium homeostasis in bovine parathyroid cells and its modulation by protein kinase C. 141

RACKE Frederick K. & NEMETH Edward F. Protein kinase C modulates hormone secretion regulated by extracellular polycations in bovine parathyroid cells. 163

LLANO Isabel & GERSCHENFELD Hersch M. Inhibitory synaptic currents in stellate cells of rat cerebellar slices. 177

LLANO Isabel & GERSCHENFELD Hersch M. β-Adrenergic enhancement of inhibitory synaptic activity in rat cerebellar stellate and Purkinje cells. 201

GANITKEVICH V. Ya. & ISENBERG G. Ca^{2+} entry through Na^+–Ca^{2+} exchange can trigger Ca^{2+} release from Ca^{2+} stores in Na^+-loaded guinea-pig coronary myocytes. 225

HOUNSGAARD Jørn & KIEHN Ole Calcium spikes and calcium plateaux evoked by differential polarization in dendrites of turtle motoneurones *in vitro*. 245

JANSSON Thomas, POWELL Theresa L. & ILLSLEY Nicholas P. Non-electrolyte solute permeabilities of human placental microvillous and basal membranes. 261

YAO Yong & PARKER Ian Inositol trisphosphate-mediated Ca^{2+} influx into *Xenopus* oocytes triggers Ca^{2+} liberation from intracellular stores. 275

FARRUGIA G., RAE J.L. & SZURSZEWSKI J.H. Characterization of an outward potassium current in canine jejunal circular smooth muscle and its activation by fenamates. 297

STOW Ruth A. & BRONK J.R. Purine nucleoside transport and metabolism in isolated rat jejunum. 311

ZOCHODNE Douglas W. & HO Lam T. Evidence that capsaicin hyperaemia of rat sciatic vasa nervorum is local, opiate-sensitive and involves mast cells. 325

STUENKEL Edward L. & NORDMANN Jean J. Intracellular calcium and vasopressin release of rat isolated neurohypophysial nerve endings. 335

STUENKEL Edward L. & NORDMANN Jean J. Sodium-evoked, calcium-independent vasopressin release from rat isolated neurohypophysial nerve endings. 357

ISHIKAWA Tomohisa, HUME Joseph R. & KEEF Kathleen D. Modulation of K^+ and Ca^{2+} channels by histamine H_1-receptor stimulation in rabbit coronary artery cells. 379

LAFORENZA U., GASTALDI G. & RINDI G. Thiamine outflow from the enterocyte: a study using basolateral membrane vesicles from rat small intestine. 401

TAKANO Nariko Ventilatory responses during arm and leg exercise at varying speeds and forces in untrained female humans. 413

CHING Shim, CATARSI Stefano & DRAPEAU Pierre Selection of transmitter responses at sites of neurite contact during synapse formation between identified leech neurons. 425

ZHU Yu & IKEDA Stephen R. Anomalous permeation of Na^+ through a putative K^+ channel in rat superior cervical ganglion neurones. 441

SHACHAR-HILL B. & HILL A.E. Convective fluid flow through the paracellular system of *Necturus* gall-bladder epithelium as revealed by dextran probes. 463

WARREN Gordon L., LOWE Dawn A., HAYES Deborah A., KARWOSKI Chester J., PRIOR Barry M. & ARMSTRONG R.B. Excitation failure in eccentric contraction-induced injury of mouse soleus muscle. 487

HARGREAVES M., RAVI K. & KAPPAGODA C.T. Effect of bradykinin on respiratory rate in anaesthetized rabbits; role of rapidly adapting receptors. 501

EDWARDS A.V. & JONES C.T. Adrenal cortical and medullary responses to acetylcholine and vasoactive intestinal peptide in conscious calves. 515

TURNBULL A.V., KIRKMAN E., ROTHWELL N.J. & LITTLE R.A. The neuropeptide CRF is involved in the modulation of the baroreflex during hindlimb ischaemia in the anaesthetized rat. 529

BARCLAY C.J., CURTIN N.A. & WOLEDGE R.C. Changes in crossbridge and non-crossbridge energetics during moderate fatigue of frog muscle fibres. 543

KAUFMAN Susan & DENG Yiming Splenic control of intravascular volume in the rat. 557

VAN DER KLOOT William Nicotinic agonists antagonize quantal size increases and evoked release at frog neuromuscular junction. 567

CHO Kyung Woo, KIM Suhn Hee, HWANG Yun Ha & SEUL Kyung Hwan Extracellular fluid translocation in perfused rabbit atria: implication in control of atrial natriuretic peptide secretion. 591

GALLAR Juana, POZO Miguel A., TUCKETT Robert P. & BELMONTE Carlos Response of sensory units with unmyelinated fibres to mechanical, thermal and chemical stimulation of the cat's cornea. 609

SHEA S.A., ANDRES L.P., SHANNON D.C. & BANZETT R.B. Ventilatory responses to exercise in humans lacking ventilatory chemosensitivity. 623

SIPIDO Karin R., CALLEWAERT Geert & CARMELIET Edward $[Ca^{2+}]_i$ transients and $[Ca^{2+}]_i$-dependent chloride current in single Purkinje cells from rabbit heart. 641

BAL Thierry & MCCORMICK David A. Mechanisms of oscillatory activity in guinea-pig nucleus reticularis thalami *in vitro*: a mammalian pacemaker. 669

NICOLL Andrew, LARKMAN Alan & BLAKEMORE Colin Modulation of EPSP shape and efficacy by intrinsic membrane conductances in rat neocortical pyramidal neurons *in vitro*. 693

REBER Bernhard F.X., STUCKI Jörg W. & REUTER Harald Unidirectional interaction between two intracellular calcium stores in rat phaeochromocytoma (PC12) cells. 711

WESTERBLAD Håkan & ALLEN David G. The contribution of $[Ca^{2+}]_i$ to the slowing of relaxation in fatigued single fibres from mouse skeletal muscle. 729

GROSSO A. & DE SOUSA R.C. Mercury blockage of apical water channels in toad skin (*Bufo marinus*). 741

DEVÉS R., ANGELO S. & CHÁVEZ P. *N*-Ethylmaleimide discriminates between two lysine transport systems in human erythrocytes. 753